<u>REMARKS</u>

The present application was filed on September 19, 2003 with claims 1-36.

In the outstanding Office Action dated April 5, 2007, the Examiner: (i) objected to claims 2, 3, 14, 20, 21 and 30; (ii) rejected claims 1-18 and 29-36 under 35 U.S.C. §101; (iii) rejected claims 1-5, 9-14 and 16-36 under 35 U.S.C. §102(e) as being anticipated by U.S. Patent Publication No. 2003/0023679 to Johnson (hereinafter "Johnson"); (iv) rejected claims 6, 7, 8 and 15 under 35 U.S.C. §103(a) as being unpatentable over Johnson in view of U.S. Patent Publication No. 2003/0097410 to Atkins et al. (hereinafter "Atkins").

In this response, Applicants traverse the §101, §102(e) and §103(a) rejections and amend the claims. Applicants respectfully request reconsideration of the application in view of the amendments above and remarks below.

With regard to the objection to claims 2, 3, 14, 20, 21 and 30, Applicants have amended claims 2, 3, 14, 20, 21 and 30 to overcome the objection.

Regarding the §101 rejection of claims 1, 29, 30, 35 and 36, Applicants respectfully submit that fostering participation in a collaborative information exchange with at least one other entity, is precisely the sort of "practical application" producing a "useful, concrete and tangible result" deemed patentable by the Federal Circuit. See, e.g., <u>AT&T Corp. v. Excel Communications Inc.</u>, 172 F.3d 1352, 1359, 50 USPQ2d 1447, 1452 (Fed. Cir. 1999) citing <u>Arrhythmia Research Technology Inc. v. Corazonix Corp.</u>, 958 F.2d 1053, 1060, 22 USPQ2d 1033, 1039 (Fed. Cir. 1992) (finding "method claims satisfied §101 because the mathematical algorithm included within the process was applied to produce a number which had specific meaning--a useful, concrete, tangible result--not a mathematical abstraction."); <u>State Street Bank & Trust Co. v. Signature Financial Group</u>, 149 F.3d 1368, 1373, 47 USPQ2d 1596, 1601 (Fed. Cir. 1998) citing <u>Arrhythmia</u> (upholding the patentable nature of "transformation of . . . signals . . . by a machine through a series of mathematical calculations constituted a practical application of an abstract idea (a mathematical algorithm, formula, or calculation), because it corresponded to a useful, concrete or tangible thing.").

Applicants note that the Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility, 1300 O.G. 142 (Nov. 22, 2005), as codified at MPEP §2106(IV)(B), state

that "[t]he burden is on the USPTO to set forth a *prima facie* case of unpatentability. Therefore if USPTO personnel determine that it is more likely than not that the claimed subject matter falls outside all of the statutory categories, they must provide an explanation." MPEP §2106(IV)(C) specifies that "USPTO personnel shall review the claim to determine it produces a useful, tangible, and concrete result. In making this determination, the focus is not on whether the steps taken to achieve a particular result are useful, tangible, and concrete, but rather on whether the final result achieved by the claimed invention is 'useful, tangible, and concrete.'"

Applicants respectfully submit that the Examiner's conclusory statement, found in the second paragraph on page 3 of this Office Action, that claims 1 and 36 are unpatentable because "[i]ndependent claims 1 and 36 are drawn towards a method for obtaining annotation data and transmitting the annotation data to one other entity" not only fails to provide the requisite explanation to support a *prima facie* case but also constitutes an improper analysis based on the steps rather than the result. Applicants thus respectfully request that, in the event that the Examiner finds the arguments heretofore presented to be unpersuasive, a new Office Action clearly setting forth a proper explanation of the Examiner's grounds for this determination should be issued and should be indicated as having a non-final status so that Applicants can be provided with a fair and reasonable opportunity to consider such explanation.

For the sake of clarification, Applicants point out that the annotation data comprising one or more links to information associated with the collaborative information exchange is manipulated by obtaining the annotation data and transmitting at least a portion of the annotation data to the at least one other entity such that the at least one other entity may access at least a portion of the information associated with the collaborative information exchange by selecting at least one of the one or more links - thus producing a "useful, concrete and tangible result."

Applicants amend independent claim 29 and traverse the §101 rejection on the further ground that "an article of manufacture … comprising a computer readable storage medium containing one or more programs" that, when executed by a computer, performs one or more steps producing a useful, concrete, and tangible result, constitutes statutory subject matter. See, e.g., In re Beauregard, 53 F.3d 1583; 35 USPQ2d 1383 (Fed. Cir. 1995); In re Lowry, 32 F.3d 1579, 32 USPQ2d 1031 (Fed. Cir.

1994). Support for the amendment can be found on page 35, lines 21-24 of the specification. More particularly, the specification at page 35, lines 21-24 states that software components including instructions or code for performing the methodologies of the claimed invention may be stored in one or more of the associated memory devices (e.g., ROM, fixed or removable memory) and, when ready to be utilized, loaded in part or in whole (e.g., into RAM) and executed by a CPU. Accordingly, the §101 rejection of claim 29 should be withdrawn.

Applicants respectfully submit that the Examiner's conclusory statement, found in the second full paragraph on page 4 of this Office Action, that claim 35 is unpatentable because "[c]laim 35 is drawn towards a method comprising the steps of deploying, defining, creating, selecting, customizing, and generating one set of activities" not only fails to provide the requisite explanation to support a *prima facie* case but also constitutes an improper analysis based on the steps rather than the result.

Accordingly, the §101 rejection of claims 1-18 and 29-36 should be withdrawn.

With regard to the §102(e) rejection, Applicants initially note that MPEP §2131 specifies that a given claim is anticipated "only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference," citing Verdegaal Bros. v. Union Oil Co. of California, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). Moreover, MPEP §2131 indicates that the cited reference must show the "identical invention . . . in as complete detail as is contained in the . . . claim," citing Richardson v. Suzuki Motor Co., 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989). Applicants respectfully traverse the §102(e) rejection on the ground that the Johnson reference fails to teach or suggest each and every limitation of claims 1-5, 9-14 and 16-36 as alleged.

Independent claim 1 is directed to a method for use by at least one entity in participating in a collaborative information exchange with at least one other entity, the method comprising the steps of: obtaining annotation data, the annotation data comprising one or more links to information associated with the collaborative information exchange; and transmitting at least a portion of the annotation data to the at least one other entity such that the at least one other entity may access at

10

least a portion of the information associated with the collaborative information exchange by selecting at least one of the one or more links.

In an illustrative embodiment of the invention, FIG. 1 illustrates an exemplary architecture of a distributed peer-to-peer collaboration system within which the present invention may be implemented. As shown, collaboration system 100 includes a product company 110 (with a project manager, a design engineer and a purchase/request for quote (RFQ) manager) which collaborates with one or more suppliers 112, one or more service providers 114 and one or more contract manufacturers 116 over a distributed network 118 such as the Internet. Each business entity or enterprise may be protected by a firewall 120. The enterprises communicate via Collaboration Extension (CE) channels in a B2B gateway such as WebSphere^{TM} (trademark of International Business Machines Corporation, Armonk, NY) Business Integration-Connect (WBI connects). However, enterprises are not limited to communicating over such channels and, therefore, may communicate over other channels and connection mechanisms.

Such an architecture is an example of a distributed information management solution which leverages web services technologies and gateway software for business process integration across multiple enterprises. The system generally operates as follows. Initially, documents to be exchanged are annotated with hyperlinks that point to a location where the real data can be downloaded or exchanged. The hyperlinks form a logical chain (hyperchain) of actions that the recipients can take to further delve into the details of the information and download information on a need basis.

That is, instead of bombarding the recipients with levels of documents to be exchanged all at once, the sender will first send the annotations only. Once the recipient receives the annotations, he or she can follow the hyperchain and take action according to their roles and authorizations in the enterprises, such as project manager, design engineer or purchase/RFQ manager, to download only those data that are needed.

In general, an on-demand information exchange model which enables implementation of the above-described operations is designed to achieve the following goals: (i) provides a flexible and uniform annotation representation for information exchange of various non-structured data without requiring pre-defined schemas; (ii) automates the annotation data generation process; and (iii)

captures and automates business collaboration interaction patterns for information exchange based on the annotation data.

In characterizing Johnson as teaching or suggesting "obtaining annotation data, the annotation data comprising one or more links to information associated with the collaborative information exchange," the Examiner refers to paragraph [0061], lines 11-18, [00720 and [0073] of Johnson. Paragraph [0061], lines 11-18 states as follows:

> The flow of control proceeds to step 71 wherein the user at originator 50, manipulates cursor control 26 and/or input device 24 to generate a collaborative element as part of the overall collaborative content, e.g., a redline markup on a drawing. The user at originator 50 may decide to create another collaborative element, or send the encoded collaborative content to the server 53 for distribution to another user at another computer system 10, e.g., receiver 52, at step 72.

Paragraph [0072] states as follows:

> [0072] FIG. 5 shows a sample of the encoded collaborative content as produced by the preferred embodiment (Listing 1 and 2) and an alternate XML implementation (Listing 3). The complete encoding consists of URL part one (Listing 1) followed immediately by URL part two (Listing 2). URL part one contains the base document or content identifier, its location on a document repository, e.g., persistent base document storage 55, and detailed viewing information. The detailed viewing information specifies the zoom level and position of the view on the particular drawing. Part one of the URL refers to the base document, and is not altered by the collaboration process.

Paragraph [0073] states as follows:

> [0073] URL part two contains the encoded annotations. In this example, the content includes three collaborative elements: a red circle, a red arrow, and a text area containing the text: "this is a collaborative element". The complete URL as specified by parts one and two is:

The Examiner points to the encoded collaborative content of Johnson as disclosing the claimed annotation data. For the sake of clarification, Applicants note that an example of annotation data comprising one or more links to information associated with the collaborative information exchange is a document to be exchanged that is annotated with hyperlinks that point to a location

where the real data can be downloaded or exchanged. The hyperlinks form a logical chain (hyperchain) of actions that the recipients can take to further delve into the details of the information and download information on a need basis. Thus, the encoded collaborative content of Johnson does not teach or suggest the claimed "annotation data". Although Johnson refers to encoded annotations, Johnson does not teach or suggest the encoded annotations comprising one or more links to information associated with the collaborative information exchange.

In characterizing the Johnson reference as teaching or suggesting "transmitting at least a portion of the annotation data to the at least one other entity such that the at least one other entity may access at least a portion of the information associated with the collaborative information exchange by selecting at least one of the one or more links," the Examiner refers to FIG. 7 and paragraph [0062] of Johnson. Paragraph [0062] states as follows:

> [0062] Once the collaborative content is received by the receiver 52 at step 74, the receiver 52 sends the collaborative content to the server process 53 where it is rendered at step 75 by the server 53 to a markup language for rendering and display at step 76 by receiver 52 using display 22. The user at receiver 52 then decides at step 77 whether to end the process and proceed to step 78, or to become an originator 50 at step 79 and create collaborative content at step 71 and send it to the prior originator 50 or another collaborating user. At step 79, the receiver 52 takes on the role of originator 50 and has the ability to create a collaborative element. The process continues until the recipient of the content decides not to send further collaborative content and the flow proceeds to step 78.

As noted above, instead of bombarding the recipients with levels of documents to be exchanged all at once, the sender will first send the annotations only. Once the recipient receives the annotations, he or she can follow the hyperchain and take action according to their roles and authorizations in the enterprises, such as project manager, design engineer or purchase/RFQ manager, to download only those data that are needed. In contrast to the claimed transmitting step, Johnson refers to transmitting the collaborative content, whereas claim 1 recites transmitting at least a portion of the annotation data to the at least one other entity such that the at least one other entity may access at least a portion of the information associated with the collaborative information exchange by selecting at least one of the one or more links.

Accordingly, it is believed that the teachings of Johnson fail to meet the limitations of claim 1.

Independent claims 19, 29, 30 and 36 include limitations similar to those of claim 1, and are therefore believed allowable for reasons similar to those described above with reference to claim 1.

Dependent claims 2-4, 9-14, 16-18, 20-28 and 31-34 are allowable for at least the reasons identified above with regard to claims 1, 19 and 30. One or more of these claims are also believed to define separately-patentable subject matter over the cited art.

Independent claim 35 is directed to a method of deploying a business collaboration system, the method comprising the steps of: deploying at least one on-demand business collaboration hyperchain-based management apparatus for use in one or more of: defining at least one business collaboration process template; creating at least one set of data constructs; selecting at least one other collaborating entity for information exchange capable of acting on at least one set of business constructs; customizing a process template to support a selected set of business constructs; and generating at least one set of activities in a business construct with initial collaborative data entities.

By way of example, the term "hyperchain" may be considered to generally refer to an annotation technology that extends the concept of a hyperlink, as used in the individual objects in a HyperText Markup Language (HTML) file, to a business information management application including such concepts as business processes, collaboration areas, supporting documents exchange for heterogeneous data streams in outsourcing, process tracking, visibility control, etc. Hyperchain annotation data can be employed by users by following the link and downloading the documents on a need basis. Such a mechanism may basically serve as a hierarchical annotation linkage. Every document in the business collaboration environment may be annotated by certain properties. Hyperchain annotations may be exchanged before any documents are exchanged. The receiver of hyperchain annotations can take actions accordingly so that document exchanges are on a demand (need) basis, which advantageously can reduce unnecessary communication traffic among the business collaboration community.

In characterizing Johnson as teaching or suggesting the limitations of claim 35, the Examiner refers to paragraph [0061] and paragraph [0062], lines 1-5 of Johnson. The relied-upon portions of Johnson do not teach or suggest the limitations as recited in claim 35.

"The receiver 52 send[ing] the collaborative content to the server process 53 where it is rendered at step 75 by the server 53 to a markup language for rendering and display at step 76 by receiver 52 using display 22," as recited in Johnson at paragraph [0062], lines 1-5, does not teach or suggest the step of "deploying at least one on-demand business collaboration hyperchain-based management apparatus for use in one or more of..." as recited in claim 35. Furthermore, the business collaboration hyperchain-based management apparatus is "on-demand," which, as noted above, is based on need for or demand of the business collaboration hyperchain-based management apparatus. As noted-above, a demand (need) basis advantageously can reduce unnecessary communication traffic among the business collaboration community. The relied-upon portions of Johnson do not teach or suggest an "on-demand" business collaboration hyperchain-based management apparatus.

In addition, the relied-upon portions of Johnson also fail to teach or suggest the defining, creating, selecting, customizing and generating steps, as recited in claim 35. For example, no where does Johnson teach or suggest a "business collaboration process template," or refer to "data constructs."

Accordingly, it is believed that the teachings of Johnson fail to meet the limitations of claim 35.

Accordingly, withdrawal of the §102(e) rejection of claims 1-5, 9-14 and 16-36 is respectfully requested.

With regard to the rejection of claims 6-8 and 15 as being unpatentable over Johnson in view of Atkins, Applicants assert that the Atkins fails to remedy the deficiencies described above with regard to Johnson. Thus, claims 6-8 and 15 are patentable at least by virtue of their dependency from claim 1. Claims 6-8 and 15 also recite patentable subject matter in their own right. Accordingly, withdrawal of the §103(a) rejection of claims 6-8 and 15 is respectfully requested.

In view of the above, Applicants believe that claims 1-36 are in condition for allowance, and respectfully request withdrawal of the §101, §102(e) and §103(a) rejections.

Respectfully submitted,

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